

**Notice of Allowability**

Application No.

10/612,949

Examiner

Dai A. Phuong

Applicant(s)

KATO, HIDENORI

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 03/23/2006.
2. ☒ The allowed claim(s) is/are 1-7, 15, 17, 21-27.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

### DETAILED ACTION

1. This is in response to the Applicant's amendments and arguments filed on 03/23/2006 in which claims 1-7, 15, 17 and 21-27 have been amended, and claims 8-14, 16, 18-20 have been canceled. Claims 21-27 have been added. Claims 1-7, 15, 17 and 21-27 are currently pending.

### Allowable Subject Matter

2. After a further search and thorough examination of the present application and in view of the application's argument and amendments, **1-7, 15, 17 and 21-27** are found to be in condition of allowance.

The following is an examiner's statement of reasons for allowance:

Regarding claim 1, the prior art record does not disclose nor fairly suggest a mobile communication system which includes a mobile unit, a radio base station, and a radio controller, wherein the radio controller comprises: first and second user plane processing means for performing processing to control transfer of user data in relation to the mobile unit; and **control plane processing means for processing to control transfer of signaling having a control signal, the control plane processing means being physically separated from the first and second user plane processing means, and when detecting a congestion state of processing, the first user plane processing means transfers a first part of the processing to the second user plane processing means while maintaining a second part of the processing at the first user plane processing mean, wherein said first user plane processing means comprises: a Layer 2 processing unit; an ATM/V interface unit that is configured to convert ATM packets input thereto from an external node to P packets and to transfer the IP packets to either said Layer 2 processing unit or to a router, said ATM/V interface unit also**

**configured to convert IP packets input thereto from said Layer 2 processing unit or from said router into ATM packets and to transfer said ATM packets to said external node; and an APL unit that is configured to provide control information to said ATM/IP interface unit to direct transfer of said ATM packets and said IP packets to either said Layer 2 processing unit or said router, wherein said APL unit comprises: a lower protocol management part; a congestion detection part that detects a state of congestion; a congestion state control part that performs control during the state of congestion as detected by said congestion detection part; a control unit for controlling said lower protocol management part, said congestion detection part, and said congestion state control part; and a bus that communicatively connects said lower protocol management part, said congestion detection part, and said congestion state control part.**

Regarding claim 21, the prior art record does not disclose nor fairly suggest a mobile communication system which includes a mobile unit, a radio base station, and a radio controller, wherein the radio controller comprises: first and second user plane processing devices configured to perform processing to control transfer of user data in relation to the mobile unit; and control plane processing devices configured to control transfer of signaling having a control signal, the control plane processing means being physically separated from the first and second user plane processing devices, and when detecting a congestion state of processing, the first user plane processing devices transfers a first part of the processing to the second user plane processing devices while maintaining a second part of the processing at the first user plane processing mean, wherein said first user plane processing means comprises: a Layer 2 processing unit; an ATM/V interface unit that is configured to

**convert ATM packets input thereto from an external node to P packets and to transfer the IP packets to either said Layer 2 processing unit or to a router, said ATM/V interface unit also configured to convert IP packets input thereto from said Layer 2 processing unit or from said router into ATM packets and to transfer said ATM packets to said external node; and an APL unit that is configured to provide control information to said ATM/IP interface unit to direct transfer of said ATM packets and said IP packets to either said Layer 2 processing unit or said router, wherein said APL unit comprises: a lower protocol management part; a congestion detection part that detects a state of congestion; a congestion state control part that performs control during the state of congestion as detected by said congestion detection part; a control unit for controlling said lower protocol management part, said congestion detection part, and said congestion state control part; and a bus that communicatively connects said lower protocol management part, said congestion detection part, and said congestion state control part.**

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submission should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dai A Phuong whose telephone number is 571-272-7896. The examiner can normally be reached on Monday to Friday, 9:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dai Phuong

AU: 2617

Date: 05-11-2006



ELISEO RAMOS-FELICIANO  
PRIMARY EXAMINER